

Abstracts

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an average LOS of only 4.62 days. The total cost per hospitalization was also lowest for HCV at \$11,797 and was significantly higher for HIV (\$14,595, $P < 0.0001$). The total cost per hospitalization for HIV and HCV co-infections was \$14,686. The total cost of non-HCV or HIV hospitalizations was nearly half (\$8,859). The probability of death associated with HCV, HIV, and co-infected HCV and HIV was 3.5%, 5.1% and 5.6% respectively while the probability of death associated with non-HIV or HIV-related hospitalizations was only 2.1%. **CONCLUSIONS:** This is one of few studies to quantify differences in inpatient costs and outcomes associated with HCV, HIV, and HCV and HIV co-infection in a multi-payer US population. Hospitalizations related to HCV and HIV co-infections were longer and more expensive compared to those related to HCV only. Policy and other decision makers should be aware of this burden as strategies to allocate resources are developed.

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MANAGEMENT AND COST ASSOCIATED WITH NON-PERMANENT CATHETER-RELATED BACTERAEMIA CAUSED BY MICROORGANISMS GRAM-POSITIVES IN SPANISH HOSPITALS SETTINGS

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OBJECTIVES: Central venous catheter (CVC) is the main reason for intrahospitalary bacteraemia. The prevalence of nosocomial Catheter-related bacteraemia (CRB) hospitalwide is 6.58%. Gram-positive microorganisms are responsible for more than 50% of these bacteraemia. This study aimed to clear management of non-permanent CRB caused by Gram-positives and resource use associated. **METHODS:** A multicenter, observational, transversal cost study was carried out, where every proven CRB was recorded. CRB was defined as a positive culture from the distal end of the catheter plus at least a positive peripheral blood culture involving isolations of the same micro-organism-. The study was performed from the hospital perspective; therefore only medical direct costs (€2007) were included: hospitalization cost, diagnosis test cost, and analytical cost. Costs were obtained from Spanish databases. Qualitative and quantitative descriptive analyses were made for all the variables. **RESULTS:** A total of 23 proven CRB and more than 400 suspected catheter infections, which did not meet criteria inclusion, were identified, in 5 Spanish hospitals. Average age was 60.17 (SD 13,799) years old, being 52.2% women. Coagulase-negative *Staphylococcus* was the micro-organism responsible for the 73.9% of CRB, mostly *S. epidermidis* (56.5%). *S. aureus* was isolated in 17.4% cases. Vancomycin was the most frequently prescribed antibiotic (47.8%), followed by teicoplanin (26.1%), with a mean duration of 8.48 (SD 4481) days. Nevertheless, 52% patients required new antibiotics as cloxaciline (20%), vancomycin (20%) and teicoplanin (20%), due to treatment failure, with a mean extra-hospital treatment duration of 5.7 (SD 4547) days. Mean time to CRB resolution-time since initial clinical signs until fever clearance- was 6.65 (SD 4.608) days, with a mean cost per episode of €4375.42. The 95% of costs are attributable to length of hospitalization, with a mean cost per episode of €4150.81, therefore, being the driver cost. **CONCLUSIONS:** CRB is associated with a profound increase in resource use. Prevention, early diagnosis, and intervention for non-permanent catheter related

bacteraemia might result in cost savings for the National Health System.

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DEVELOPING AN ECONOMIC MODEL OF GRAM+ COMPLICATED SKIN AND SOFT TISSUE INFECTIONS (CSSTI) FOR INPATIENT AND OUTPATIENT TREATMENT SETTINGS

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OBJECTIVES: Previous economic analyses of gram + cSSTIs have not included costs related to outpatient parenteral antibiotic therapy (OPAT). The objective of this analysis was to develop a core model framework and appropriate inputs to estimate medical and drug costs within both inpatient and outpatient components of care for treating gram + cSSTIs and serve as a basis for comparing vancomycin with newer antibiotics. **METHODS:** A 4-week decision model was developed to estimate the direct total, inpatient, and outpatient costs of treating gram + cSSTIs from a payer perspective taking into account successes, failures, and adverse events. Published literature provided clinical inputs and resource use data, with validation by expert opinion. Cost data was derived from literature and standard CPT coding reimbursements. Sensitivity analyses tested efficacy, complication rates, length of stay, and other resource use parameters. Costs were reported in 2008US\$. **RESULTS:** Drug acquisition cost for 14 days of vancomycin 1gm IV q12hr was \$257; however, the total 4-week cost of treatment including clinical failures, complications, and OPAT ranged from \$8,214–\$13,133 (66–86% of cost inpatient, 14–33% outpatient). Important vancomycin cost drivers beyond the inpatient stay (\$1219/day) included OPAT cost (\$175/day), line placement and complications related to OPAT (\$739/patient), physician visits (\$192/patient), injection supply/admin costs (\$183/patient), and lab work (\$98/patient). Antibiotics with favorable dosing/administration profiles reduced OPAT costs and provided opportunity for early discharge. The most sensitive model variables for total cost were the MRSA efficacy rate, length of hospital stay, days of OPAT and line complications. **CONCLUSIONS:** The model framework and results suggest that the costs associated with generic vancomycin for treatment of cSSTIs may be substantial, with a significant portion of costs extending into the outpatient arena. The budget impact of newer antimicrobials should be evaluated in the context of total medical cost offsets from both inpatient and outpatient perspectives.

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DIRECT MEDICAL COSTS AND PRODUCTIVITY LOSS ASSOCIATED WITH VENOUS LEG ULCER

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OBJECTIVES: To understand real-world impacts of venous leg ulcer (VLU) on direct medical costs and productivity in the US and the UK. **METHODS:** This prospective, observational, multicenter study enrolled 112 patients with VLU (US: 76 and UK: 36). Patients were followed for 12 weeks or until all their ulcers healed in 2007 and 2008. Data were gathered on health care resources used at the study site as well as outside the study site (using patient diaries). Standard national data sources were used to assign unit costs to the resources used. The mean direct medical cost was estimated from the US payer, US provider, and UK National Health Service (NHS) perspectives separately and